



# TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH

332 EAST MABEL STREET, TUCSON, ARIZONA 85705-7455

(520) 620-6804

November 18, 2001

Evan Nikirk  
Mono County Department of Public Works  
P.O. Box 457  
Bridgeport, California 93517

RE: Benton Crossing Landfill

Dear Mr. Nikirk,

This letter reports on an archaeological survey of the Benton Crossing Landfill and proposed expansion, Mono County, California, conducted by Trans-Sierran Archaeological Research (TSAR) for the Mono County Department of Public Works, Bridgeport, California. The work was completed as a first step in meeting *California Environmental Quality Act* (CEQA) requirements for mitigating the effects of the proposed project on cultural resources. The existing 95-acre landfill would be expanded adjacent to the current operation north within a 45-acre area and southwest within a 5-acre area (Map 1). Archaeological work completed included a 100 percent survey of the entire project area (Map 2) and archival research. To summarize, one potentially significant archaeological site was found. If the site cannot be avoided during project implementation, testing is recommended to determine its significance.

The project area is northeast of the Mammoth Lakes Airport in Long Valley, on City of Los Angeles land administered by the Department of Water and Power. Specifically the project area is located in the central portion of section 16, Township 3 South, Range 29 East, Mount Diablo Baseline and Meridian. At an elevation of 6900 feet, the project area is within the desert scrub vegetation community. Plant species include sagebrush (up to 5-ft tall), rabbitbrush, bitterbrush, desert broom, and buckwheats. Hot Creek is to the north, the Owens River to the east, Big Alkali Lake to the south, and alkali flats lie to the west. Soils within the project area consist of sandy pumice and gravels of pumice, tuff, obsidian, and basalt. A few unmodified obsidian cobbles were noted in the project area.

Prior to field work, a records check was initiated through the regional office of the California Historic Resources Information System (CHRIS) at the Eastern Information Center, University of California, Riverside. As the designated information center for Inyo, Mono, and Riverside counties, the Eastern Information Center has copies of all archaeological reports and site records

for the area. Their records indicated that no archaeological surveys had been conducted and no sites were recorded within the project area (Attachment 1). Two sites have been recorded within one-half mile of the project area. One of the sites (CA-MNO-700) consists of several loci of flaked and ground stone tools and moderate- to heavy-density scatters of obsidian, chert, and basalt debitage. The other site (CA-MNO-701) is a small rock shelter with a few obsidian flakes. Both sites overlook Big Alkali Lake, and both were originally recorded by Kuhn and Jersey (1975). The site record for CA-MNO-700 was updated by Bettinger during his systematic stratified random sample of the Long Valley "Known Geothermal Resource Area" (Bettinger 1975).

Field work for the Benton Crossing Landfill expansion was conducted October 5, 2001. The entire project area, including existing and proposed landfill areas, was surveyed by three archaeologists with pedestrian traverses 20 to 30 meters apart along east-west compass bearings. In undisturbed areas ground visibility was excellent. Within the landfill proper, undisturbed areas and cut banks in excavated areas were sought out and examined. Besides the modern trash in and around the landfill itself, one archaeological site, one isolate, and a "redeposited" site were discovered within the project area.

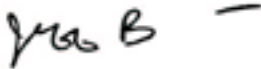
BC-01 is an area of redeposited prehistoric material, located within the existing landfill. A total of 5 by 25 meters in size, it consists of one round pile and two linear piles of dark midden soil, and includes granite boulders not native to the location. Abundant obsidian debitage and a small biface fragment were observed in the three dirt piles. The inclusion of large boulders suggests the sediments likely came from lot clearing in Mammoth Lakes, where glacial till is common. Other piles of redeposited fill did not contain artifacts. The piles are visible as mounds in the 1993 aerial photograph (Figure 1), indicating the material was dumped prior to 1993. Without integrity of location, association, or context, the cultural material has lost its information and associative potential and is not significant.

BC-02 is a sparse prehistoric lithic scatter covering 2,200 square meters southwest of the existing landfill (see Attachment 2, site record). The site includes of three biface fragments, two cores, and about 50 flakes. The site is located in the western half of the proposed southwest expansion area, and extends to the edge of the terrace, to the west. Overlooking an alkali flat north of Big Alkali Lake, the site may represent a specialized adaptation focusing on lakeshore resources (Figure 2). The significance of this site would depend on whether it can yield adequate samples of high resolution data, either as a single-component site or through the presence of stratified subsurface deposits. Further archaeological work would be needed to determine its data potential and hence significance.

BC-03 is an isolated obsidian core (Figure 3). It was found in the proposed northern expansion area. As an isolated artifact, it does not meet CEQA criteria for significance.

In closing, the Benton Crossing Landfill expansion as proposed would affect one potentially significant archaeological site, BC-02. Avoidance of the site (by deleting the site area from the proposed 5-acre southwest expansion) or further work field work is recommended.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff B" followed by a horizontal line.

Jeff Burton

Enclosures

## References Cited

Bettinger, Robert L.

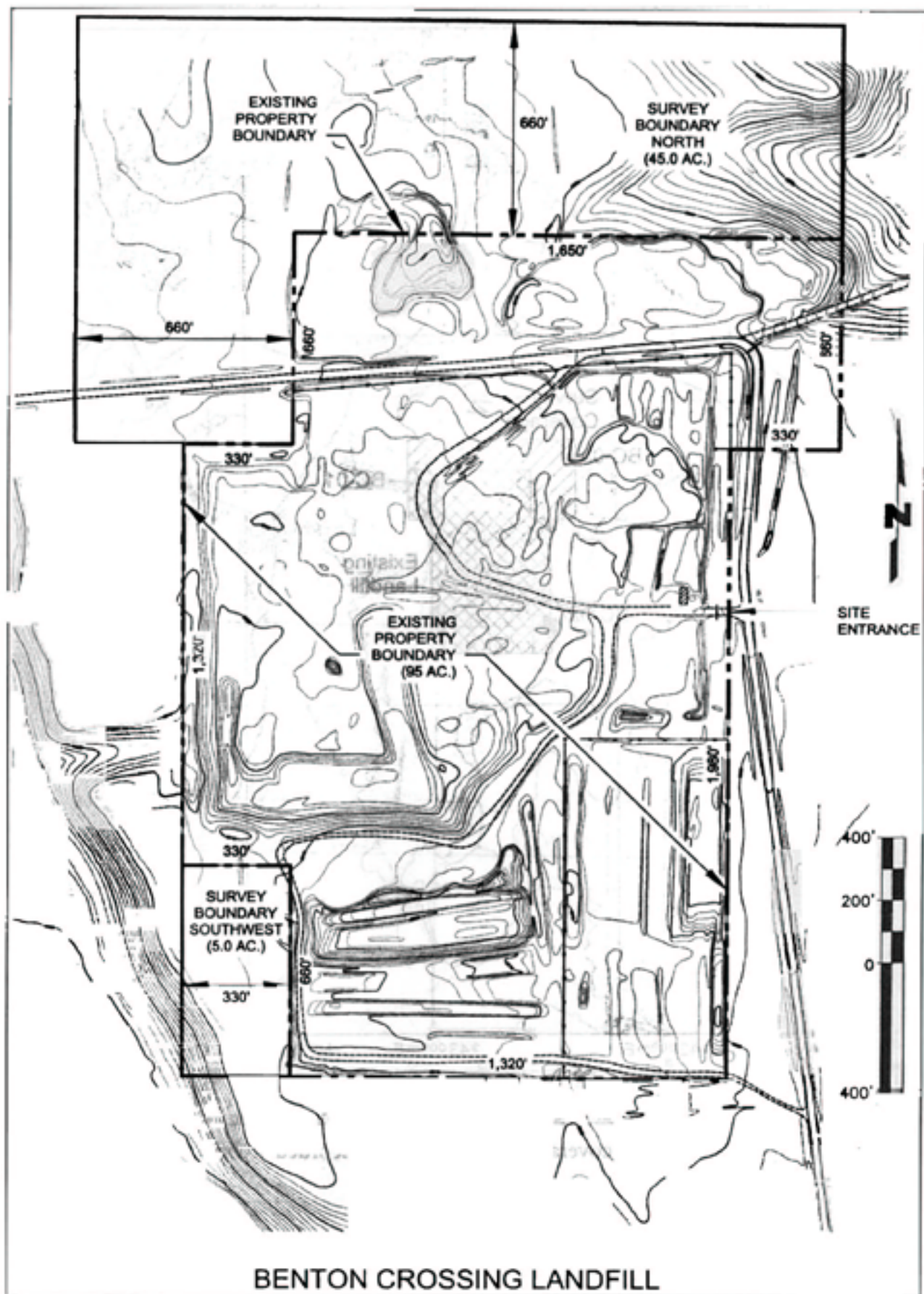
1975 The Surface Archaeology of Owens Valley, Eastern California: Prehistoric Man-Land Relationships in the Great Basin. Ph.D. dissertation. Department of Anthropology, University of California, Riverside.

1977 The Surface Archaeology of the Long Valley Caldera, Mono County, California. Archaeological Research Unit Monograph 1. Riverside, California.

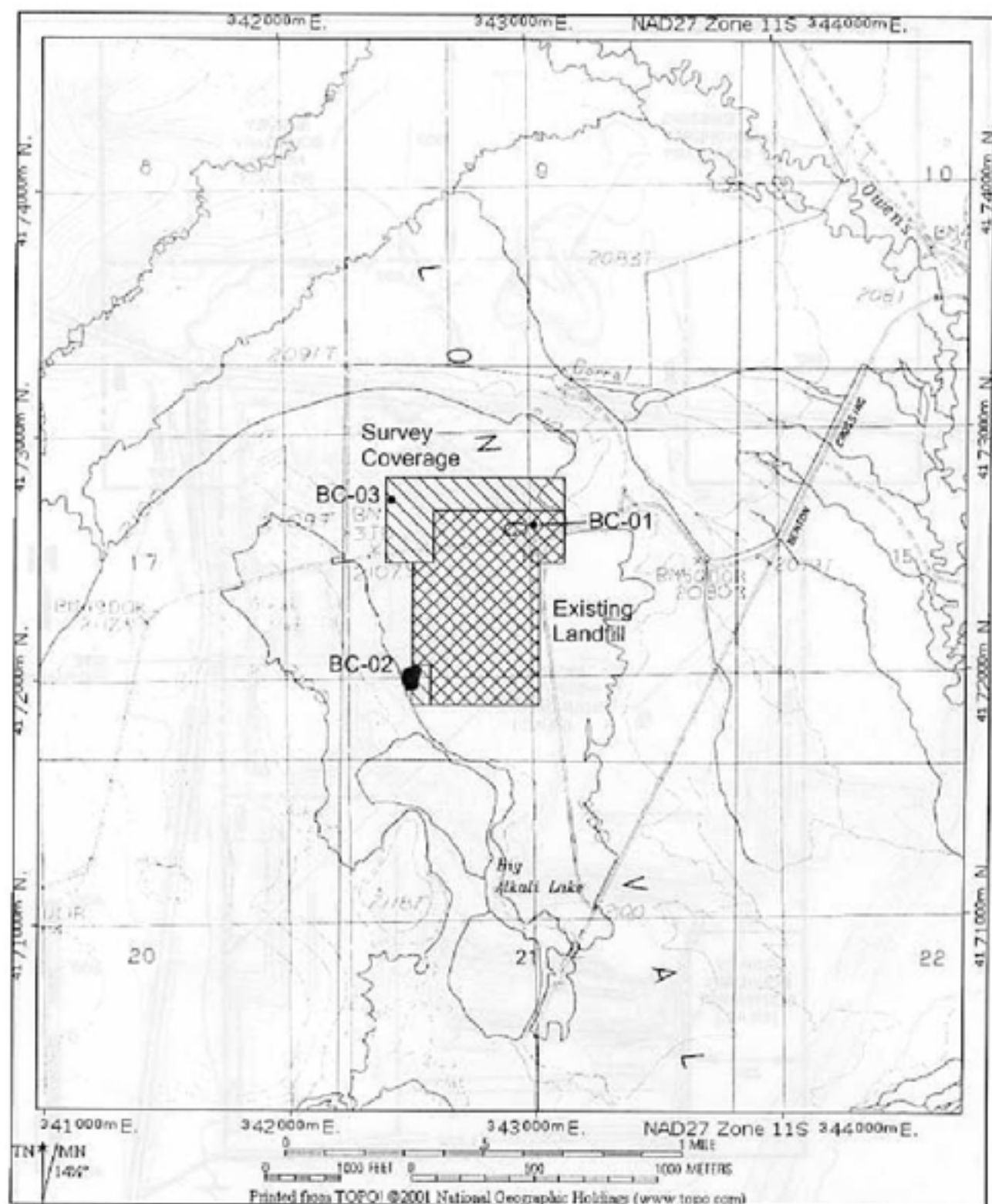
Kuhn, Clyde, and Elizabeth Jersey

1975 Archaeological Survey of Known Geothermal Resource Areas, Inyo National Forest, California, Part III: Accomplishments, Observations, and Re-evaluations. MS on file, Inyo National Forest, California.





Map 1. Benton Crossing Landfill Project Area.



Map 2. Archeological survey coverage and locations of recorded archeological resources.



Figure 1. "Redeposited site (BC-01).

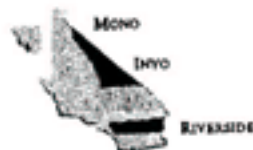


Figure 2. Archeological site BC-02.



Figure 3. Isolated obsidian core (BC-03).





October 31, 2001  
RS #2539

Jeff Burton  
Trans-Sierran Archaeological Research  
332 East Mabel Street  
Tucson, AZ 85705

Re: Cultural Resources Records Search for Mono County Landfills

Dear Mr. Burton:

We received your request on October 29, 2001, for a cultural resources records search for the Mono County Landfills Project located in Mono County. We have reviewed our site records, maps, and manuscripts against the location map you provided.

**Pumice Valley (specifically in Section 26, T.1N, R.26E, MDBM)**

Our records indicate that a cultural resources survey has not been conducted on the subject property. One study has been conducted that is adjacent to or within a one-half mile radius of the subject property. This report is listed on the attachment entitled "Archeological Reports" and is available upon request at 15¢/page plus \$30/hour. The KEYWORD section of each citation lists the geographic area, quad name, listing of trinomials (when identified), report number in our manuscript files (MF #), and the number of pages per report.

No archaeological sites or historical properties are known within the project boundaries; and our records indicate that no archaeological sites or historical properties have been recorded within a one-half mile radius of the project area.

**Long Valley (specifically in Section 16, T.3S, R.29E, MDBM)**

Our records indicate that a cultural resources survey has not been conducted on the subject property. One study has been conducted that is adjacent to or within a one-half mile radius of the subject property. This report is listed on the attachment entitled "Archeological Reports" and are available upon request at 15¢/page plus \$30/hour. The KEYWORD section of each citation lists the geographic area, quad name, listing of trinomials (when identified), report number in our manuscript files (MF #), and the number of pages per report.

No archaeological sites or historical properties are known within the project boundaries; however, our records indicate that two archaeological sites have been recorded within a one-half mile radius of the project area. Copies of the records are included for your study needs.



The above information is reflected on the enclosed maps. Areas that are shaded in yellow indicate areas that have been surveyed. Numbers in pencil indicate the report number in our manuscript files (MF #). Areas in red show the location of cultural resources, and their corresponding numbers in black represent the state trinomial. A red dot associated with a primary number (green) indicates an isolated artifact or an incomplete archaeological site record, or an historical resource.

In addition to the California Historical Resources Information System, the following were reviewed:

The National Register of Historic Places Index (03/30/99): None of the properties or sites are listed.

Office of Historic Preservation, Archaeological Determinations of Eligibility (listed through 08/23/00): None of the sites have been evaluated for eligibility.

Office of Historic Preservation, Directory of Properties in the Historic Property Data File (dated 08/23/00): None.

Copies of the 1953 USGS Mono Craters 15' and 1953 USGS Mt. Morrison 15' topographic maps are included for your study needs. The General Land Office plat maps for Mono County are on file at UC Berkeley.

This statement does not constitute a negative declaration of impact. This statement reports only known archaeological materials on or in the vicinity of the property in question. The presence of cultural resources on the property cannot be ruled out until a systematic survey is conducted.

Federal and State law requires that if any cultural resources are found during construction, work is to stop and the lead agency and a qualified archaeologist be consulted to determine the importance of the find.

As the Information Center for Mono County, it is necessary that we receive a copy of all archaeological reports and site information pertaining to this county in order to maintain our map and manuscript files. Site location data provided with this records search are not to be used for reports unless the information is within the project boundaries. This information is confidential.

Sincerely,

  
Taryn Rampley  
Information Officer

Enclosures

Document No.: 1083815  
BETTINGER, ROBERT LAWRENCE

Dissertation/Thesis

1975 THE SURFACE ARCHAEOLOGY OF OWENS VALLEY, EASTERN CALIFORNIA: PREHISTORIC MAN-LAND RELATIONSHIPS IN THE GREAT BASIN. PH.D. DISSERTATION. UNIVERSITY OF CALIFORNIA, RIVERSIDE, ANTHROPOLOGY DEPARTMENT.

Last Update: 03/27/1992 Cataloged by: WRO-CA-04 on 06/12/1991  
Keywords: MF #3458 (6), 404 PP (7), UNKNOWN ACREAGE SURVEYED (4), OWENS VALLEY REGION (4), UNKNOWN RESOURCES (8), LONG VALLEY CALDERA (4), HAMMIL/BENTON VALLEYS (4), YES RESOURCES (8)

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Document No.: 1085172  
BURTON, JEFF

Unpublished Report

1997 LETTER REPORT - MONO ROCK EXPANSION. TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH. SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT EASTERN INFORMATION CENTER, U.C. RIVERSIDE, CA 92521.

Last Update: 04/27/1998 Cataloged by: WRO-CA-04 on 04/27/1998  
Keywords: MF #4486 (6), 05 PP (7), 38 ACRES SURVEYED (4), LEE VINING 7.5' (4), MONO BASIN (4), NO RESOURCES (8)

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## PRIMARY RECORD

Primary # \_\_\_\_\_

HRI # \_\_\_\_\_

Trinomial \_\_\_\_\_

NRHP Status Code \_\_\_\_\_

Other Listings \_\_\_\_\_

Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

Page 1 of 5

Resource Name/Number: BC-02

P1. Other Identifier: None

P2. Location: ☒ Not for Publication ☐ Unrestricted

b. USGS 7.5' Quad: Whitmore Hot Springs, Calif.

c. Address: None.

d. UTM: Zone 11N: 342522 mE, 4171995 mN (differentially-corrected GPS reading,  $\pm 2$  m accuracy).

e. Other Locational Data: Just southwest of the Mono County Benton Crossing Landfill.

a. County: Mono

T 3S; R 29E; NE $\frac{1}{4}$  of the SW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 16

P3a. Description: BC-02 is a sparse lithic scatter on a low terrace overlooking an alkali flat north of Big Alkali Lake. The site covers an area 70 m by 100 m. Artifacts include three obsidian biface fragments, two obsidian cores, and about 50 obsidian flakes.

P3b. Resource Attributes (and Codes): (AP2) Lithic Scatter.

P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other:

P5a: Photograph or Drawing:



P5b. Description of Photograph: Site overview towards Big Alkali Lake (south).

P6. Date Const/Age and Sources:

☐ Historic ☒ Prehistoric ☐ Both

P7. Owner and Address: Los Angeles Department of Water and Power, 300 Mandich St., Bishop, California 93514.

P8. Recorded by: Jeff Burton, Leah Bonstead, and Laura Bergstresser; Trans-Sierran Archaeological Research, 332 East Mabel Street, Tucson, Arizona 85705.

P9. Date Recorded: 10/5/01

P10. Survey Type: Intensive.

P11. Report Citation: Burton, Jeffery F. (2001), Benton Crossing Landfill Archaeological Survey. Letter report on file, Mono County Department of Public Works, Bridgeport, California.

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record ☒ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other: \_\_\_\_\_



## ARCHAEOLOGICAL SITE RECORD

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Resource Name/Number: BC-02

A1. Dimensions: 70 m E/W by 100 m N/S; 2,200 m<sup>2</sup>

Method of Measurement: ☒ Paced ☐ Taped ☐ Visual estimate ☐ Other: \_\_\_\_\_

Method of Determination: ☒ Artifacts ☐ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank  
☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other: \_\_\_\_\_

Reliability of Determination: ☒ High ☐ Medium ☐ Low

Explain: Excellent visibility.

Limitations: ☐ Restricted access ☐ Paved/built over ☐ Site limits incompletely defined ☒ Disturbances  
☐ Vegetation ☐ Other: \_\_\_\_\_

A2. Depth: \_\_\_\_\_ ☐ None ☒ Unknown

A3. Human Remains: ☐ Present ☒ Absent ☐ Possible ☐ Unknown (Explain):

A4. Features: None apparent.

A5. Cultural Constituents: Three obsidian biface fragments, two obsidian cores, and about 50 obsidian flakes. Artifacts surface density is less than 2/m<sup>2</sup>. Obsidian types present include black opaque (Casa Diablo), black opaque with inclusions (local cobbles), and translucent-cloudy (Mono Glass Mtn?).

A6. Were Specimens Collected? ☒ No ☐ Yes

A7. Site Condition: ☐ Good ☒ Fair ☐ Poor; there is a small pit and two recent rock clusters in the northern portion of the site.

A8. Nearest Water: Big Alkali Lake 300 m south.

A9. Elevation: 2100 m (6890 ft) amsl.

A10. Environmental Setting:

Vegetation community: Sagebrush scrub.

Vegetation on site: Sagebrush, bitterbrush, sparse grasses and forbs.

Site soil: Unconsolidated sandy silt with some pebbles and gravels.

Surrounding soil: Same.

Other associations: None noted.

Geology: No bedrock outcrops.

Landform: Terrace above alkali flat.

Slope and aspect: 1° SW.

Exposure: Open.

A11. Historical Information: None.

A12. Age: ☒ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☐ 1880-1914 ☐ 1914-1945  
☐ Post 1945 ☐ Undetermined

Position in Regional Chronology or Factual Dates if Known: Undetermined.

A13. Interpretations: None.

A14. Remarks: None.

A15. References: Burton, Jeffery F. (2001), Benton Crossing Landfill Archaeological Survey. Letter report on file, Mono County Department of Public Works, Bridgeport, California.

A16. Photographs: Digital files 3239-3249.

Original Media/Negatives at: Trans-Sierran Archaeological Research, 332 East Mabel Street, Tucson, Arizona 85705.

A17. Form Prepared by: Jeff Burton, Leah Bonstead, and Laura Bergstresser

Date: 10/5/01

Affiliation and Address: Trans-Sierran Archaeological Research, 332 East Mabel Street, Tucson, Arizona 85705.



# CONTINUATION SHEET

Page 3 of 5

Resource Name/Number: BC-02

Recorded by: Jeff Burton

Date: 10/5/01

☒ Continuation ☐ Update



Biface fragments (scale approx. 1:1)

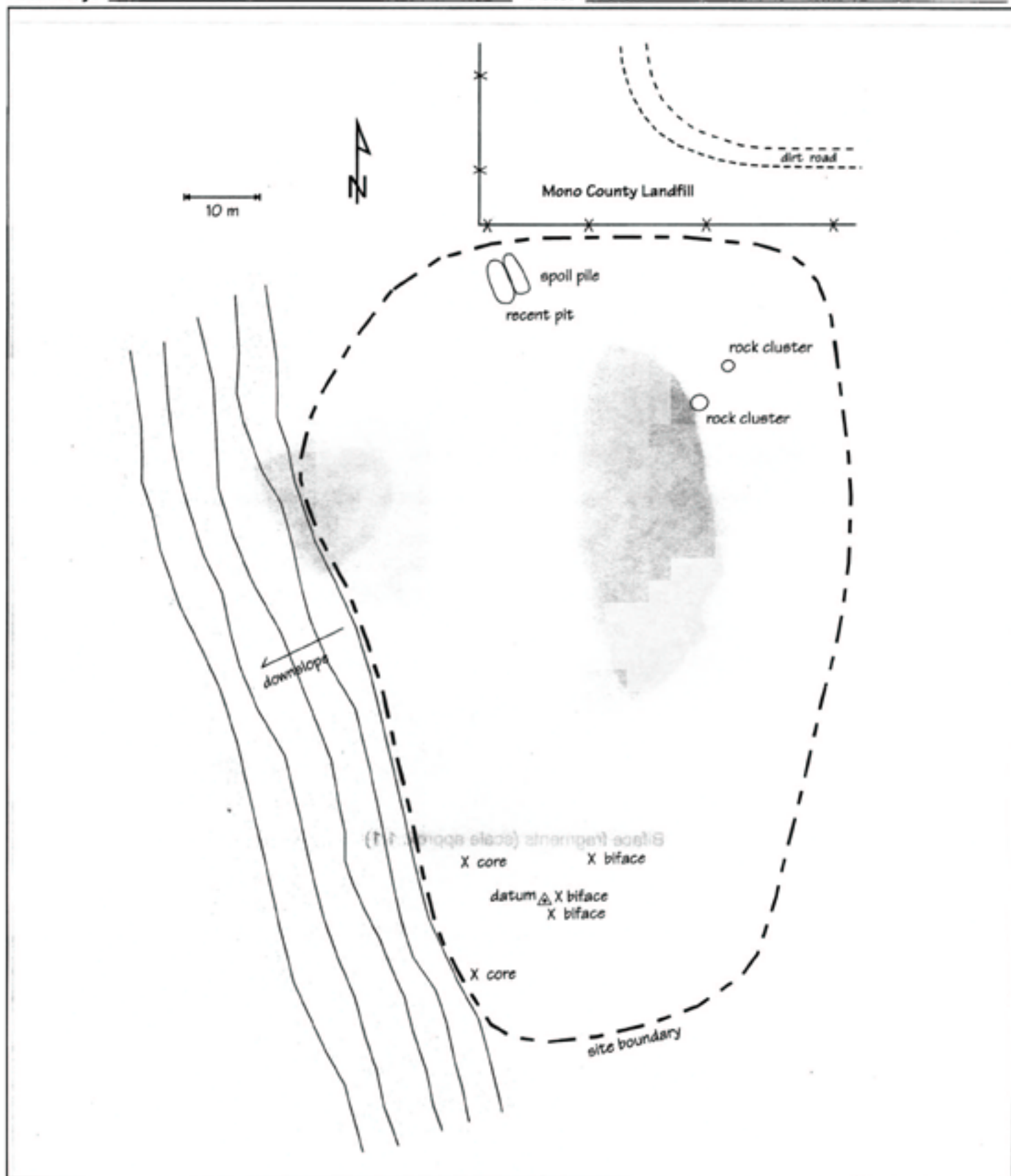
# SKETCH MAP

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Resource Name/Number: BC-02

Drawn by: Leah Bonstead

Date: 10/5/01



# LOCATION MAP

